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EXAMINER
NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
2454	

NOTIFICATION DATE	DELIVERY MODE
02/03/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

iplaw@stites.com

	Application No.	Applicant(s)
Office Action Summary	10/785,048	DATE ET AL.
	Examiner	Art Unit	
	DUSTIN NGUYEN	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 October 2010</u>.
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>16 and 17</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>16 and 17</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 16 and 17 are presented for examination.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

10/25/2010 has been entered.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The analysis under 35 U.S.C. 112, first paragraph, requires that the scope of

protection sought be supported by the specification disclosure. The pertinent inquiries

include determining (1) whether the subject matter defined in the claims is described in

the specification and (2) whether the specification disclosure as a whole is to enable

one skilled in the art to make and use the claimed invention.

(1) Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as containing

subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention.

The "invention" for the purpose of the first paragraph analysis is defined by the

claims. The description requirement is simply that the claimed subject matter must be

described in the specification. The function of the description requirement is to ensure

that the applicant had possession of the invention on the filing date of the application.

The application need not describe the claim limitations exactly, but must be sufficiently

clear for one of ordinary skill in the art to recognize that the applicant's invention

encompasses the recited limitations. The description requirement is not met if the

application does not expressly or inherently disclose the claimed invention.

Specification does not explicitly describe nor is sufficiently clear for one of

ordinary skill in art to recognize the following steps as recited in claim 16:

- a search packet sending module configuring ping packets using MPEG-TS

  (Moving Picture Experts-Group-Transports Stream) formatted IP packet data

  and sending the ping packets to the data delivery server as search packets.

In the amendment filed on 10/25/2010, Applicant's remarks fail to show where

the specification supported this limitation. At best, the specification discloses the data

packet generation module generates the data packet by taking into account the MTU as

determined, by way of example, the data concerned is an MPEG-TS which is a sort of picture code data, and the packet of MPEG-TS is a packet of the fixed length of 188 bytes [page 12, lines 15-page 13, lines 10], and the MTU search module can be carried out by the conventional method [page 12, lines 2-14]. So, the MTU search module is carried out by the conventional method and the packet generation module generates the data packet according to the MPEG-TS, not the search packet sending module configuring ping packets using MPEG-TS, thus it is unclear how this quoted paragraph of the present specification can be equated with the claimed limitations "...a search packet sending module configuring ping packets using MPEG-TS (Moving Picture Experts-Group-Transports Stream) formatted IP packet data and sending the ping packets to the data delivery server as search packets ..." in claim 16.

Therefore, claim 16 is unclear that the one ordinarily skilled in the art cannot recognize the encompassed claimed limitations.

(2) Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The enablement requirement necessitates a determination that the disclosure contains sufficient teaching regarding the subject matter claimed as to enable one skilled in the pertinent art to make and use the claimed invention. In essence, the scope of enablement provided to one ordinarily skilled in the

art by the disclosure must be commensurate with the scope of protection sought by the claims.

Currently, the most prevalent standard for measuring sufficient enablement to meet the requirements of 112 is that of "undue experimentation". The test is whether, at the time of the invention, there was sufficient working procedure for one skilled in the art to practice the claimed invention without undue experimentation. It is important to note that the test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue. A skilled artisan is given sufficient direction or guidance in the disclosure. Moreover, the experimentation required, in addition to not being undue, must not require ingenuity beyond that expect of one of ordinary skill in the art.

Undue experimentation and ingenuity would be required beyond one ordinarily skilled in the art to practice the following steps as recited in claim 16:

- a search packet sending module configuring ping packets using MPEG-TS (Moving Picture Experts-Group-Transports Stream) formatted IP packet data and sending the ping packets to the data delivery server as search packets.

Undue experimentation would be needed to make a search packet sending module configuring ping packets using MPEG-TS (Moving Picture Experts-Group-Transports Stream) formatted IP packet data and sending the ping packets to the data delivery server as search packets.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

5.   Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maufer

et al. [US Patent No 7,684,440], in view of Firestone [US Patent No 6,965,646], and further in

view of Morioka et al. [US Patent No 7,228,422], .

6.   As per claim 1, Maufer discloses the invention as claimed including a data delivery

system including at least one mobile terminal and a data delivery server connected to the at least

one mobile terminal via a network for delivering IP packets having payloads with data packets

recorded internally therein to the at least one mobile terminal [i.e. method for determining a

non-standard fame size that is useable by the network element] [Figure 1; and Abstract],

        wherein a first mobile terminal of the at least one mobile terminal includes an application

module issuing a request for data delivery to the data delivery server and a search packet sending

module sending ping packets to the data delivery server as search packets [i.e. sending MTU

probe to target station to discover the maximum frame size] [204, Figure 2; col 4, lines 42-58],

each ping packet having a different packet size [i.e. sending second non-standard MTU size that

is adjusted from the first non-standard size] [206, Figure 2; and col 4, lines 60-col 5, lines 7],

wherein the data delivery server includes a Search packet detecting module for detecting

a search packet sent from the first mobile terminal and received by the data delivery server and

for determining a maximum size for a single IP packet to be sent to the first mobile terminal

based upon a packet size of the detected search packet [i.e. determining the maximum frame size

that can be sent by the sending station and received by the target station when the target station

replies in response to MTU probe] [332, 350, Figure 3; col 7, lines 26-54; and claim 1].

Maufer does not specifically disclose

wherein the data delivery server includes a packet generating module for determining a

total number of data packets to be stored in a payload of the single IP packet based upon the

maximum size for the single IP packet and for storing a set of data packets into the payload of

the single IP packet, the set of data packets being of the total number of data packets determined

by the packet generating module so as to prevent fragmentation of the single IP packet.

Firestone discloses wherein the data delivery server includes a packet generating module

for determining a total number of data packets to be stored in a payload of the single IP packet

based upon the maximum size for the single IP packet and for storing a set of data packets into

the payload of the single IP packet, the set of data packets being of the total number of data

packets determined by the packet generating module so as to prevent fragmentation of the single

IP packet [i.e. the segmentor will create network packets that have as many bytes as possible

without going over the MTU size] [Figure 3B; col 8, lines 42-55; and col 10, lines 63-col 11,

lines 8].

It would have been obvious to a person skill in the art at the time the invention was made

to combine the teaching of Maufer and Firestone because the teaching of Firestone would enable

to determine the proper size for information to be transmitted without reducing or lowering the transmission efficiency.

Maufer and Firestone do not specifically disclose the search packet sending module configuring ping packets using MPEG-TS (Moving Picture Experts-Group-Transports Stream) formatted IP packet data.

Morioka discloses the search packet sending module configuring ping packets using MPEG-TS (Moving Picture Experts-Group-Transports Stream) formatted IP packet data [i.e. detect the maximum transmission packet size in a path and MPEG-TS is used as an example of video signal process] [col 29, lines 56-col 30, lines 42].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Maufer, Firestone and Morioka because the teaching of Morioka would enable to provide a packet sending/receiving apparatus for generating packets by using encrypted data (for example AV data) and sending/receiving the generated packets by using Ethernet which conforms to standards such as IEEE 802.3 standard [Morioka, col 1, lines 6-13].

7.   As per claim 17, Maufer discloses wherein, upon each sending of a ping packet to the data delivery server, the search packet sending module waits for an Internet Control Message Protocol (ICMP) packet undeliverableness message corresponding to the ping packet and, for each received ICMP packet undeliverableness message corresponding to the ping packet until no ICMP packet undeliverableness message corresponding to the ping packet is received, the search packet sending module resizes and resends the ping packet [i.e. repeat the peer MTU discovery process and ICMP frame can be used as a PMP] [Figure 3; and col 8, lines 66-col 9, lines 28].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/
Primary Examiner, Art Unit 2454